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Re:

Attn: Mail Stop Amendment

Peter A. Socarra

th C Bass II

ed only in Virginia

WRITER'S DIRECT NUMBER: (202) 772-8846 INTERNET ADDRESS: PCALVO@SKGF.COM

Art Unit: 1644

Commissioner for Patents PO Box 1450

Alexandria, VA 22313-1450

U.S. Utility Patent Application,

Application No. 10/551,209; § 371 Date: September 28, 2005

Methods of Identifying Optimal Variants of Peptide Epitopes Inventors: BAKER et al.

July 11, 2006

2473.0260001/EKS/PAC Our Ref:

Sir:

Transmitted herewith for appropriate action are the following documents:

- Request for Change of Attorney Docket Number Pleading;
- Information Disclosure Statement Under 37 C.F.R. § 1.97(b);
- Form PTO/SB/08A (2 pages) listing cited documents US1-US15 and FP1-FP21;
- Form PTO/SB/08B (8 pages) listing cited documents NPL1-NPL77;
- 5. First Supplemental Disclosure Statement Under 37 C.F.R. § 1.97(b);
- Form PTO/SB/08A (2 pages) listing cited documents US16-US35 and FP22-FP31;
- Form PTO/SB/08B (8 pages) listing cited documents NPL80-NPL158;
- Copies of cited documents FP1-FP31, NPL1-NPL76 and NPL80-NPL158; and
- One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are Commissioner for Patents July 11, 2006 Page 2

necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Paul A. Calvo
Agent for Applicants

Registration No. 57,913

EKS/PAC/CLD/amz Enclosures

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

BAKER et al.

Application No.: 10/551,209

§ 371 Date: September 28, 2005

For: Methods of Identifying Optimal Variants of Peptide Epitopes

Confirmation No.: 8322

Art Unit: 1644

Examiner: To be assigned

Atty. Docket: 2473.0260001/EKS/PAC

Request for Change of Attorney Docket Number Pleading

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir

Applicants respectfully request that the attorney docket number for the abovecaptioned application changed from "2006.0260001/EKS/PAC" -- 2473.0260001/EKS/PAC --. Kindly use this attorney docket number in any future correspondence addressed to the undersigned.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C

A Paul A. Calvo

Agent for Applicants Registration No. 57,913

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600 524702v1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit:

In re application of:

BAKER et al.

Appl. No.: 10/551,209

§ 371 Date: September 28, 2005

For: Methods of Identifying Optimal Variants of Peptide Epitopes Confirmation No.: 8322

Examiner: To be assigned

1644

Atty. Docket: 2473.0260001/EKS/PAC

Information Disclosure Statement under 37 C.F.R. § 1.97(b)

Mail Stop Amendment

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Forms, PTO/SB/08A and PTO/SB/08B, are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Copies of documents FP1-FP21 and NPL1-NPL76 are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of U.S. patents and patent application publications, documents US1 to US15, cited on the attached IDS Form, PTO/SB/08A, are not submitted. In addition, a copy of documents NPL77 is not provided in accordance with the U.S. Patent and Trademark Office OG notice of October 19, 2004, which states: "the requirement in 37 C.F.R. § 1.98(a)(2)(iii) for a legible copy of the specification, including the claims, and drawings of each cited pending U.S. patent

application (or portion of the application which caused it to be listed) is sua sponte waived where the cited pending application is stored in the USPTO's IFW system."

In accordance with 37 C.F.R. § 1.98(a)(3), Applicants' undersigned representative submits the following discussion of the relevance of the non-English language documents FP2. FP5. and FP8 cited on Form PTO/SB/08A:

Document FP2, EP 0 226 513 A1, is in a foreign language. An English language abstract of document FP2 is attached as Document NPL74.

Document FP5, WO 92/21033 A1, is in a foreign language. An English language abstract of document FP5 is attached as Document NPL75.

Document FP8, WO 94/11738 A1, is in a foreign language. An English language abstract of document FP8 is attached as Document NPL76.

The Examiner's attention is directed to the following co-pending U.S. Patent Applications, which are directed to related technical subject matter:

Application No. 09/189,702, inventors Sette et al., filed November 10, 1998; pending and listed on accompanying PTO/SB/08B as Document NPL77.

The identification of these U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.

Atty. Dkt. No. 2473.0260001/EKS/PAC

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

Agent for Applicants Registration No. 57,913

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

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respond to a collection of information unless it contains a valid OMB control number Complete if Known Application Number 10/551,209

§ 371 Date September 28, 2005 INFORMATION DISCLOSURE BAKER, Denise Marie First Named Inventor STATEMENT BY APPLICANT Art Unit 1644 /Marianne DiBrino/ Examiner Name To De Assigned 2473.0260001/EKS/PAC of Attorney Docket Number

			U.S. PATENT D			
Exa m iner Initials	Cite No. ¹	Document Number Number-Kind Code ^{2 (ITKnown)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Pag ent Columns, Lir	
	USI	5,200,320	04/06/1993	Sette et al.		
	US2	5,503,829	04/02/1996	Ladant et al.		
	US3	5,662,907	09/02/1997	Kubo et al.		
	US4	5,846,827	12/08/1998	Celis et al.		
	US5	6,034,214	03/07/2000	Boon et al.		
	US6	6,413,517	07/02/2002	Sette et al.		
-	US7	2002/0098197 A1	07/25/2002	Sette et al.		
	US8	2002/0160019 A1	10/31/2002	Sette et al.		
	US9	2002/0177694 A1	11/28/2002	Sette et al.		
	US10	6,534,482	03/18/2003	Fikes et al.		
	USII	2003/0099634 A1	05/29/2003	Vitiello et al.		
	US12	2003/0152580 A1	08/14/2003	Sette et al.	1	
	US13	2003/0185822 A1	10/02/2003	Grey et al.		
	US14	2003/0203869 A1	2003/0203869 A1 10/30/2003 F			
	US15	2003/0220285 A1	11/27/2003	Fikes et al.		
			FOREIGN PATENT			
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ³	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Pages, Columns, Lines	_T
	FP1	EP 0 044 710 A1	01/27/1982	Scripps Clinic & Research Foundation	Commiss, Erites	Ľ
	FP2	EP 0 226 513 A1	06/24/1987	institut Pasteur		Αb
	FP3	WO 92/02543 A1	02/20/1992	Cytel Corp. et al.		
	FP4	WO 92/12996 A2	08/06/1992	Immune Response Corp.		Г
	FP5	WO 92/21033 A1	11/26/1992	Max-Planck-Gesellschaft	7	Αb
	FP6	WO 93/03764 A1	03/04/1993	Cytel Corp.		\vdash
	FP7	WO 94/03205 A1	02/17/1994	Cytel Corp.		Т
-	FP8	WO 94/11738 A1	05/26/1994	Max-Planck-Gesellschaft		Ab
	FP9	WO 94/20127 A1	09/15/1994	Cytel Corp.		۳
	FP10	WO 95/04817 A1	02/16/1995	Cytel Corp.		\vdash
	FP11	WO 95/22317 A1	08/24/1995	Cytel Corp.		┰
	FP12	WO 96/03140 A1	02/08/1996	Cytel Corp.		⊢
	17712	WO 90/03140 A1	02/00/1990	Cyter Corp.		_

Examiner Signature	Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique distation designation number (optional). See kinds Codes of USPTO Platnic Documents at www. usepo.go or wREPP 010.4. Eiter (Diffice that issued the document, by the Nove-letter code (NIPO Standard ST3s, 1-For Japanese patent documents, the indication of the year of the reign of the Emperor must precode the serial number of metaphoration of the patent document. Yield of document by the appropriets symbols as indicated on the document unique VIPO Standard ST13, 1-For possible. Applicant is to place hock mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing his burden, should be sent to the Chief Information Officer, U.S. Pather and Trademark Office, P.O. 80x 1450, Alexandrie, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

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Substitute for form 1449/PTO	Complete if Known	
	Application Number	10/551,209
INFORMATION DISCLOSURE	§ 371 Date	September 28, 2005
	First Named Inventor	BAKER, Denise Marie
STATEMENT BY APPLICANT	Art Unit	1644
	Examiner Name	To Be Assigned
Sheet 2 of 2	Attorney Docket Number	2473 0260001/EKS/PAC

U.S. PATENT DOCUMENTS							
Examiner Initials	Cite No.	Document Number Number-Kind Code ^{2 ((Known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Pages, Columns, Lines		

		1	FOREIGN PATENT D	DCUMENTS		
Examiner Cite Initials* No.1		Foreign Patent Document Country Code ³ Number ⁴ Kind Code ³	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Pages, Columns, Lines	T ⁶
	FP13	WO 97/33602 A1	09/18/1997	Cytel Corp.		
	FP14	WO 97/34621 A1	09/25/1997	Cytel Corp.		Г
	FP15	WO 98/32456 A1	07/30/1998	Epimmune Inc.		Г
	FP16	WO 99/45954 A1	09/16/1999	Epimmune Inc.		Г
	FP17	WO 99/58658 A2	11/18/1999	Epimmune Inc.		Г
	FP18	WO 99/61916 A1	12/02/1999	Epimmune Inc.		
	FP19	WO 99/65522 A1	12/23/1999	Epimmune Inc.		
	FP20	WO 02/20616	03/14/2002	Epimmune Inc.		Г
	FP21	WO 02/061435 A2	08/08/2002	Epimmune Inc.		
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Examiner	Date	
Signature	Considered	

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This condition of Information is accusived by 37 CFR 1,97 and 1,98. The information is required to obtain or retain a benefit by the public which is to life (and by the LSPTO to operate) are policiation. Confidentiality is governed by 35 U.S. C. 122 and 37 CFR 1,41. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the comoleted application from to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing his burden, should be sent for Cell information Officer. U.S. Patent and Trademark Office, P.O. Box 1459, Absrandrio, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1459, Absrandrio, VA 22313-1450, DO NOTS.

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bstitute for form 1449/PTO Complete if Known Application Number 10/551,209 § 371 Date September 28, 2005 INFORMATION DISCLOSURE First Named Inventor BAKER, Denise Marie STATEMENT BY APPLICANT 1644 Art Unit Examiner Name To Be Assigned Sheet of Attorney Docket Number 2473.0260001/EKS/PAC 8

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author, title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher	T ²
	NPL1	Aichele, P., et al., "Antiviral cytotoxic T cell response induced by in vivo priming with a free synthetic peptide," <i>J. Exp. Med. 171</i> :1815-1820, Rockefeller University Press (1990)	
	NPL2	Alexander, J., et al., "Derivation of HLA-A11/K ^b Transgenic Mice. Functional CTL Repertoire and Recognition of Human A11-Restricted CTL Epitopes," J. Immunol. 159-4753-4761, The American Association of Immunologists (1997)	
	NPL3	Bergmann, C.C., et al., "Differential Effects of Flanking Residues on Presentation of Epitopes from Chimeric Peptides," J. Virol. 68:5306-5310, American Society for Microbiology (1994)	
	NPL4	Bertoni, R., et al., "Human Histocompatibility Leukocyte Antigen-binding Supermotifs Predict Broadly Cross-reactive Cytotoxic T Lymphocyte Responses in Patients with Acute Hepatitis," J. Clin. Invest. 100:503-513, The American Society for Clinical Investigation, Inc. (1997)	
	NPL5	Bertoni, R., et al., "Human Class I Supertypes and CTL Repertoires Extend to Chimpanzees," J. Immunol. 161:4447-4455, American Association of Immunologists (1998)	
	NPL6	Bjorkman, P.J., et al., "Structure of the human class I histocompatibility antigen, HLA-A2," Nature 329:506-512, Macmillan Publishers, Ltd. (1987)	
	NPL7	Bjorkman, P.J., et al., "The foreign antigen binding site and T cell recognition regions of class I histocompatibility antigens," Nature 329:512-518, Macmillan Publishers, Ltd. (1987)	
	NPL8	Buus, S., et al., "Autologous Peptides Constitutively Occupy the Antigen Binding Site on la," Science 242:1045-1047, American Association for the Advancement of Science (1988)	
	NPL9	Carreno, B.M., et al., "HLA-B37 and HLA-A2.1 molecules bind largely nonoverlapping sets of peptides," <i>Proc. Natl. Acad. Sci. USA</i> 87:3420-3424, National Academy Press (1990)	
	NPL10	Corr, M., et al., "Endogenous Peptides of a Soluble Major Histocompatibility Complex Class I Molecule, H-2Ld _s : Sequence Motif, Quantitative Binding, and Molecular Modeling of the Complex," <i>J. Exp. Med. 176</i> :1681-1692, Rockefeller University Press (1992)	

Examiner	Date
Signature	Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and

"EXAMINEE: Initial if reference considered, whether or not citation is in conformance with MPEP 600. Draw line through citation if not in conformance and not cresideder, include copy of this form with neal commission to application is to place a check must here if English inappage Translation is stated. Applicant's unique citation designation number (citation). Pagingaria to place a check must here if English inappage Translation is stated and the Commission of the Commission

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				Application Number	10/551,209
IMPOD	N. F. A. TEV	ON	DISCLOSURE	§ 371 Date	September 28, 2005
					BAKER, Denise Marie
STATE	MEN	LB	Y APPLICANT	Art Unit	1644
				Examiner Name	To Be Assigned
Sheet	2	of	8	Attorney Docket Number	2473.0260001/EKS/PAC

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author, title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher	T ²
	NPL11	De Bruijn, M.L.H., et al., "Peptide loading of empty major histocompatibility complex molecules on RMA-S cells allows the induction of primary cytotoxic T lymphocyte responses," <i>Eur. J. Immunol.</i> 21:2963-2970, VCH Verlagsgesellschaft mbH (1991)	
	NPL12	Del Val, M., et al., "Efficient Processing of an Antigenic Sequence for Presentation by MHC Class I Molecules Depends on Its Neighboring Residues in the Protein," Cell 66:1145-1153, Cell Press (1991)	
_	NPL13	Deres, K., et al., "In vivo priming of virus-specific cytotoxic T lymphocytes with synthetic lipopeptide vaccine," Nature 342:561-564, Macmillan Publishers, Ltd. (1989).	
	NPL14	DiBrino, M., et al., "HLA-A1 and HLA-A3 T Cell Epitopes Derived from Influenza Virus Proteins Predicted from Peptide Binding Motifs," J. Immunol. 151:5930-5935, The Association of Immunologists (1993)	
	NPL15	DiBrino, M., et al., "Endogenous peptides bound to HLA-A3 possess a specific combination of anchor residues that permit identification of potential antigenic peptides," Proc. Natl. Acad. Sci. USA 90:1508-1512, National Academy Press (1993)	
	NPL16	Ding, YH., et al., "Two Human T Cell Receptors Bind in a Similar Diagonal Mode to the HLA-A2/Tax Peptide Complex Using Different TCR Amino Acids," Immunity 8:403-11, Cell Press (1998)	
	NPL17	Eisenlohr, L.C., et al., "Flanking Sequences Influence the Presentation of an Endogenously Synthesized Peptide to Cytotoxic T Lymphocytes," J. Exp. Med. 175:481-487, The Rockefeller University Press (1992)	
	NPL18	Engelhard, V.H., "Structure of peptides associated with MHC Class I molecules," Curr. Opin. Immunol. 6:13-23, Current Biology, Ltd. (1994)	
	NPL19	Falk, K., et al., "Allele-specific motifs revealed by sequencing of self-peptides eluted from MHC molecules," <i>Nature 351</i> :290-296, Macmillan Publishers, Ltd. (1991)	
	NPL20	Falk, K., et al., "MHC peptide motif register. Peptide motifs of HLA-B35 and -B37 molecules," Immunogenetics 38:161-162, Springer-Verlag (1993)	

Examiner	Date
Signature	Considered

EXAMINER: mide if reference considered, whether or not clation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant, and include copy of this form with next communication to applicant.

*Applicant's unique citation designation number (optional). *Applicant is to place a check mark here it English language Translation is attached. USPTO is processed an application. Confidentially is governed by 35 CRT 1.8. This collection is retained between the type by the visit is to file (and by the USPTO is processe) an application. Confidentially is governed by 35 U.S. C. 122 and 37 CRT. 1.4. This collection is estimated to take 2 hours to complete, comments on the amount of time by our equire to complete this form and/or suppetions for enducing this burden, should be sent for Cert information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Abstrantia, V.A. 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO Commissioner for Patents, P.O. Box 1450, Alexandria, V.A. 22313-1450.

PTO/SB/08B (08-04)

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Substitute for	form 144	9/РТО		Complete if Known		
				Application Number	10/551,209	
INFOR	MATI	ION	DISCLOSURE	§ 371 Date	September 28, 2005	
			Y APPLICANT	First Named Inventor	BAKER, Denise Marie	
SIAIE	MIEN	1 D	APPLICANT	Art Unit	1644	
				Examiner Name	To Be Assigned	
Sheet	3	of	8	Attorney Docket Number	2473.0260001/EKS/PAC	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author, title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher	T ²
	NPL21	Falk, K., et al., "Allele-specific peptide ligand motifs of HLA-C molecules," Proc. Natl. Acad. Sci. USA 90:12005-12009, National Academy Press (1993)	
	NPL22	Falk, K., et al., "Pool sequencing of natural HLA-DR, DQ, and DP ligands reveals detailed petide motifs, constraints of processing, and general rules," Immunogenetics 39:230-242, Springer-Verlag (1994)	
	NPL23	Falk, K., et al., "Peptide motifs of HLA-A1, -A11, -A31, and -A33 molecules," Immunogenetics 40:238-241, Springer-Verlag (1994)	
	NPL24	Foon, K.A., "Biological Response Modifiers: The New Immunotherapy," Cancer Res. 49:1621-1639, American Association for Cancer Research (1989)	
	NPL25	Geysen, H.M., et al., "Cognitive Features of Continuous Antigenic Determinants," J. Mol. Recognit. 1:32-41, Heyden & Sons, Ltd. (1988)	
	NPL26	Guo, HC., et al., "Different length peptides bind to HLA-Aw68 similarly at their ends but bulge out in the middle," <i>Nature</i> 360:364-366, Macmillan Publishers, Ltd. (1992)	
	NPL27	Henderson, R.A., et al., "HLA-A2.1-Associated Peptides from a Mutant Cell Line: A Second Pathway of Antigen Presentation," Science 235:1264-1266, American Association for the Advancement of Science (1992)	
	NPL28	Hill, A., et al., "Characterization of two Epstein-Barr virus epitopes restricted by HLA-B7," Eur. J. Immunol. 25:18-24, VCH Verlagsgesellschaft mbH (1995)	
	NPL29	Hunt, D.F., et al., "Characterization of Peptides Bound to the Class I MHC Molecule HLA-A2.1 by Mass Spectrometry," Science 255:1261-1263, American Association for the Advancement of Science (1992)	
	NPL30	Ishioka, G.Y., et al., "Utilization of MHC Class I Transgenic Mice for Development of Minigene DNA Vaccines Encoding Multiple HLA-Restricted CTL Epitopes," J. Immunol. 162:3915-3925, The American Association of Immunologists (1999)	

EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

^{&#}x27;Applicant's unique citation designation number (optional). *Applicant is to place a check mark here it English language Translation is attached.

This collection of information is required by 37 CFR 1.8. The information is required to belian or retain a benefit by the public where the USPTO is process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete. On the confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete. On the confidentiality of the complete of the confidentiality of the confidentiality of the confidentiality of the complete of the confidentiality of the confidentiali

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Substitute for	form 144	9/PTO		Con	nplete if Known
				Application Number	10/551,209
INFOR	MATI	ON	DISCLOSURE	§ 371 Date	September 28, 2005
				First Named Inventor	BAKER, Denise Marie
SIAII	SIVILLIN	IB	APPLICANT	Art Unit	1644
				Examiner Name	To Be Assigned
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author, title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher	T ²
	NPL31	Jameson, S.C., and Bevan, M.J., "Dissection of major histocompatibility complex (MHC) and T cell receptor contact residues in a K ^D -restricted ovalbumin peptide and an assessment of the predictive power of MHC-binding motifs," Eur. J. Immunol. 22:2663-2667, VCH Verlagsgesellschaft mbH (1992)	
	NPL32	Jardetzky, T.S., et al., "Identification of self peptides bound to purified HLA-B27," Nature 353:326-329, Macmillan Publishers, Ltd. (1991)	
	NPL33	Kannagi, M., et al., "Target Epitope in the Tax Protein of Human T-Cell Leukemia Virus Type I Recognized by Class I Major Histocompatibility Complex-Restricted Cells," J. Virol. 66:2928-2933, American Society for Microbiology (1992)	
	NPL34	Kast, W.M., et al., "Protection against lethal Sendai virus infection by in vivo priming of virus-specific cytotoxic T lymphocytes with a free synthetic peptide," Proc. Natl. Acad. Sci. USA 88:2283-2287, National Academy Press (1991)	
	NPL35	Kast, W.M., et al., "Strict peptide length is not required for the induction of cytotoxic T lymphocyte-mediated antiviral protection by peptide vaccination," Eur. J. Immunol. 23:1189-1192, VCH Verlagsgesellschaft mbH (1993)	
	NPL36	Krieger, J.L., et al., "Single amino acid changes in DR and antigen define residues critical for peptide-MHC binding and T cell recognition," J. Immunol. 146:2331-2340, American Association of Immunologists (1991)	
	NPL37	Lipford, G.B., et al., "Primary in Vivo Responses to Ovalbumin. Probing the Predictive Value of the K ^b Binding Motif," J. Immunol. 150:1212-1222, The American Association of Immunologists (1993)	
	NPL38	Maryanski, J.L., et al., "Synthetic peptides as antigens and competitors in recognition by H-2-restricted cytolytic T cells specific for HI.A," J. Exp. Med. 167:1391-1405, Rockefeller University Press (1988)	
	NPL39	Maryanski, J.L., et al., "Competitor Analogs for Defined T Cell Antigens: Peptides Incorporating a Putative Binding Motif and Polyproline or Polyglycine Spacers," Cell 60:63-72, Cell Press (1990)	

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			Y APPLICANT	First Named Inventor	BAKER, Denise Marie
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Sheet	5	of	8	Attorney Docket Number	2473.0260001/EKS/PAC

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author, title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher	T ²
	NPL40	Morrison, J., et al., "Identification of the nonamer peptide from influenza A matrix protein and the role of pockets of HLA-A2 in its recognition by cytotoxic T lymphocytes," Eur. J. Immunol. 22:903-907, VCH Verlagsgesellschaft mbH (1992)	
	NPL41	Niedermann, G., et al., "The proteolytic fragments generated by vertebrate proteosomes: Structural relationships to major histocompatibility complex class I binding peptides," Proc. Natl. Acad. Sci. USA 93:8572-8577, National Academy Press (1996)	
	NPL42	Ochoa-Garay, J., et al., "The ability of peptides to induce cytotoxic T cells in vitro does not strongly correlate with their affinity for the H-2L ^d molecule: implications for vaccine design and immunotherapy," Mol. Immunol. 34:273-281, Elsevier Science, Ltd. (1997)	
	NPL43	Pamer, E.G., et al., "Precise prediction of a dominant class I MHC-restricted epitome of <i>Listeria monocytogenes</i> ," <i>Nature 353</i> :852-855, Macmillan Publishers, Ltd. (1991)	
	NPL44	Parham, P., et al., "The Origins of HLA-A,B,C Polymorphism," Immunol. Rev. 143:141-180, Munksgaard (1995)	
	NPL45	Parker, K.C., et al., "Peptide Binding to HLA-A2 and HLA-B27 Isolated from Escherichia coli," J. Biol. Chem. 267:5451-5459, American Society for Biochemistry and Molecular Biology, Inc. (1992)	
	NPL46	Parker, K.C., et al., "Sequence motifs important for peptide binding to the human MHC class I molecule, HLA-A2," J. Immunol. 149:3580-3587, American Association of Immunologists (1992)	
	NPL47	Rammensee, HG., et al., "Peptides Naturally Presented by MHC Class I Molecules," Annu. Rev. Immunol. 11:213-244, Annual Reviews, Inc. (1993)	
	NPL48	Rammensee, HG., et al., "MHC ligands and peptide motifs: first listing," Immunogenetics 41:178-228, Springer-Verlag (1995)	

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Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author, title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher	T ²
	NPL49	Reddehase, M.J., et al., "A pentapeptide as minimal antigenic determinant for MHC class I-restricted T lymphocytes," <i>Nature 337</i> :651-653, Macmillan Publishers, Ltd. (1989)	
	NPL50	Romero, P., et al., "H-2K ^d -restricted Antigenic Peptides Share a Simple Binding Motif," <i>J. Exp. Med. 174</i> :603-612, Rockefeller University Press (1991)	
	NPL51	Rothbard, J.B., "Major histocompatibility complex-peptide interactions," Curr. Opin. Immunol. 2:99-105, Current Biology, Ltd. (1989)	
	NPL52	Rötzschke, O., et al., "Isolation and analysis of naturally processed viral peptides as recognized by cytotoxic T cells," <i>Nature 348</i> :252-254, Macmillan Publishers, Ltd. (1990).	
	NPL53	Rötzschke, O., et al., "Characterization of Naturally Occurring Minor Histocompatibility Peptides Including H-4 and H-Y," Science 249:283-287, American Association for the Advancement of Science (1990)	
	NPL54	Rötzschke, O., and Falk, K., "Naturally-occurring peptide antigens derived from the MHC class-I-restricted processing pathway," <i>Immunol. Today 12</i> :447-455, Elsevier Science Publishers, Ltd. (1991)	
	NPL55	Rötzschke, O., et al., "Peptide motifs of closely related HLA class I molecules encompass substantial differences," Eur. J. Immunol. 22:2453-2456, VCH Verlagsgesellschaft mbH (1992)	
	NPL56	Rötzschke, O., and Falk, K., "Origin, structure and motifs of naturally processed MHC class II ligands," <i>Curr. Opin. Immunol. 6:</i> 45-51, Current Biology, Ltd. (1994)	
	NPL57	Rudinger, J., "Characteristics of the amino acids as components of a peptide hormone sequence," in <i>Peptide Hormones</i> , Parsons, J.A., ed., University Park Press, Baltimore, MD, pp.1-7 (1976)	
	NPL58	Ruppert, J., et al., "Prominent Role of Secondary Anchor Residues in Peptide Binding to HLA-A2.1 Molecules," Cell 74:929-937, Cell Press (1993)	

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Sheet	7	of	8	Attorney Docket Number	2473.0260001/EKS/PAC

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author, title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher	T ²
	NPL59	Schulz, M., et al., "Major histocompatibility complex binding and T cell recognition of a viral nonapeptide containing a minimal tetrapeptide," Eur. J. Immunol. 21:1181-1185, VCH Verlagsgesellschaft mbH (1991)	
	NPL60	Sette, A., et al., "Prediction of major histocompatibility complex binding regions of protein antigens by sequence pattern analysis," Proc. Natl. Acad. Sci. USA 86:3296-3300, National Academy Press (1989)	
	NPL61	Sette, A., et al., "Random association between the peptide repertoire of A2.1 class I and several different DR class II molecules," J. Immunol. 147:3893-3900, The American Association of Immunologists (1991)	
	NPL62	Sette, A., et al., "The Relationship Between Class I Binding Affinity and Immunogenicity of Potential Cytotoxic T Cell Epitopes," J. Immunol. 173:5586-5592, The American Association of Immunologists (1994)	
	NPL63	Shastri, N., et al., "Presentation of Endogenous Peptide/MHC Class I Complexes Is Profoundly Influenced by Specific C-Terminal Flanking Residues," J. Immunol. 135: 4339-4346, The American Association of Immunologists (1995)	
	NPL64	Sherman, L.A., et al., "Extracellular Processing of Peptide Antigens That Bind Class I Major Histocompatibility Molecules," J. Exp. Med. 175:1221-1226, The Rockefeller University Press (1992)	
	NPL65	Shimojo, N., et al., "Specificity of peptide binding by the HLA-A2.1 molecule," J. Immunol. 143:2939-2947, The American Association of Immunologists (1989)	
	NPL66	Sidney, J., et al., "Several HLA Alleles Share Overlapping Peptide Specificities," J. Immunol. 154:247-259, The American Association of Immunologists (1995)	
	NPL67	Threlkeld, S.C., et al., "Degenerate and Promiscuous Recognition by CTL of Peptides Presented by the MHC Class I A3-like Superfamily. Implications for Vaccine Development," J. Immunol. 159:1648-1657, The American Association of Immunologists (1997)	
	NPL68	Wentworth, P.A., et al., "Differences and similarities in the A2.1-restricted cytotoxic T cell repertoire in humans and human leukocyte antigen-transgenic mice," Eur. J. Immunol. 26:97-101, VCH Verlagsgesellschaft mbH (1996)	

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Attorney Docket Number

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author, title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher	T ²
	NPL69	Whitton, J.L., et al., "Molecular Analyses of a Five-Amino-Acid Cytotoxic T-Lymphocyte (CTL) Epitope: an Immunodominant Region Which Induces Nonreciprocal CTL Cross-Reactivity," J. Virol. 63:4303-4310, American Society for Microbiology (1989)	
	NPL70	Yewdell, J.W., and Bennink, J.R., "Cell Biology of Antigen Processing and Presentation to Major Histocompatibility Complex Class I Molecule-Restricted TLymphocytes," Adv. Immunol. 52:1-123, Academic Press (1992)	
	NPL71	York, I.A., and Rock, K.L., "Antigen processing and presentation by the class I major histocompatibility complex," <i>Annu. Rev. Immunol.</i> 14:369-396, Annual Reviews, Inc. (1996)	
	NPL72	Zhang, Q-J., et al., "An HLA-Al1-specific motif in nonamer peptides derived from viral and cellular proteins," Proc. Natl. Acad. Sci. USA 90:2217-2221, National Academy Press (1993)	
	NPL73	Parker, K.C., et al., "Scheme for Ranking Potential HLA-A2 Binding Peptides Based on Independent Binding of Individual Peptide Side-Chains," <i>J. Immunol.</i> 152:163-175, The American Association of Immunologists (1994)	
	NPL74	Dialog File 351, Accession No. 7180926, Derwent WPI English language abstract for EP 0 226 513 (Document AM1)	-
***************************************	NPI 75	Dialog File 351, Accession No. 9263567, Derwent WPI English language abstract for WO 92/21033 (Document APT)	-
	NPL76	Dialog File 351, Accession No. 9888606, Derwent WPI English language abstract for WO 94/11738 (Document AN2)	
	NPL77	U.S. Patent Application No. 09/189,702, Sette <i>et al.</i> , filed November 10, 1998 (NOT PUBLISHED)	

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

BAKER et al.

Appl. No.: 10/551,209

§ 371 Date: September 28, 2005

For: Methods of Identifying Optimal Variants of Peptide Epitopes Confirmation No.: 8322

Art Unit: 1644

Examiner: To be assigned

Atty. Docket: 2473.0260001/EKS/PAC

First Supplemental Information Disclosure Statement

Under 37 C.F.R. § 1.97(b)

Mail Stop Amendment

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Forms, PTO/SB/08A and PTO/SB/08B, are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this First Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Information Disclosure Statement filed herewith in connection with the above-captioned application.

Copies of documents FP22 to FP31 and NPL80 to NPL157 are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of U.S. patents and patent application publications, documents US16 to US35, cited on the attached IDS Form, PTO/SB/08A, are not submitted. In addition, a copy of document NPL158 is not provided in accordance with the U.S. Patent and Trademark Office OG notice of October 19, 2004, which states: "the requirement in 37 C.F.R. § 1.98(a)(2)(iii) for a legible copy of the specification, including the claims, and drawings of each cited pending U.S. patent

application (or portion of the application which caused it to be listed) is sua sponte waived where the cited pending application is stored in the USPTO's IFW system."

The Examiner's attention is directed to the following co-pending U.S. Patent Application, which is directed to related technical subject matter:

Application No. 10/817,970, inventors Grey et al., filed April 6, 2004; pending and listed on accompanying PTO/SB/08B as Document NPL158;

The identification of this U.S. Patent Application is not to be construed as a waiver of secrecy as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

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BAKER et al. Appl. No. 10/551,209

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted berewith.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Paul A. Calvo
Agent for Applicants
Registration No. 57.913

Date:

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			FOREIGN PATENT DOC	UMENTS		
Examin er Initials*	Cite No.1	Foreign Patent Document Country Code* Kind Code ⁵ (in known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁸
	FP22	EP 0 378 881	06/09/1993	Eniricerche S.p.A.		
	FP23	EP 0 429 816	06/05/1991	F. Hoffmann-La Roche AG		
	FP24	EP 0 433 242	06/19/1991	Fondazione Andrea Cesalpino		
	FP25	WO 93/03764	03/04/1993	Cytel Corporation		
	FP26	WO 94/20127	09/15/1994	Cytel Corporation		
	FP27	WO 95/07707	03/23/1995	Cytel Corporation		

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	US34	2004/0157273	08/12/2004	Sidney et al.	
	US35	2005/0049197	03/03/2005	Sette et al.	
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	FP29	WO 97/41440	11/06/1997	Rijksuniver Leiden and	Seed Capital			
-	FP30	WO 97/34617	09/25/1997	Cytel Corp	oration			
	FP31	WO 01/00225	01/04/2001	Epimmune	Inc.			
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		NON PATENT LITERATURE DOCUMENTS	
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	NPL80	Alexander, J., et al., "Development of High Potency Universal DR-Restricted Heiper Epitopes by Modification of High Affinity DR-Blocking Pepitoles," Immunity 1:751-761, Cell Press (1994)	
	NPL81	Amdl, S.O., et al., *Selection of the MHC Class II-Associated Poptide Repertoire by HLA-DM,* Immunol. Res. 16:201-272, Humano Press (1997)	T
	NPL82	Barouch, D., et al., "H.AA.2 Subtypes Are Functionally Distinct in Peptide Binding and Presentation," J. Exp. Med. 182:1947-1856, Rockefeller University Press (1995)	\top
_	NPL83	Bender, A., et al., "Improved methods for the generation of dendritic cells from nonproliferating progenitors in human blood," J. Immunol. Methods 196: 121-135, Elsevier Science (1998)	
-	NPL84	Ben-Yeddila, T., and Arnon, R., "Design of peptide and polypeptide vaccines," Curr. Opin. Biotechnol. 8:442-448, Current Biology, Ltd. (1997)	+
	NPL85	Carbone, F.R., and Bevan, M.J., "Induction of Ovalbumin-Specific Cytotoxic T Cells by In Vivo Peptide Immunization," J. Exp. Med. 169:603-612, Rockefeller University Press (1989)	+
	NPL88	Carbone, F.R., et al., "Induction of Cytoloxic T Lymphocytes by Primary In Vitro Stimulation with Peptides," J. Exp. Med. 167:1787-1779, Rockefeller University Press (1988)	
	NPL87	Cassell, D., and Forman, J., "Linked Recognition of Helper and Cytotoxic Antigenic Determinants for the Generation of Cytotoxic T Lymphocytes," Ann. N.Y. Acad. Sci.532:51-60, New York Academy Of Sciences (1991)	
	NPL88	Deres, K., et al., "In vivo priming of virus-specific cytotoxic T lymphocytes with synthetic lipopeptide vaccine," Nature 342:561-564, Nature Publishing Group (1989)	1
	NPL89	del Guercio, M-F., et al., "Potent immunogenic short linear peptide constructs composed of B cell epitopes and Pan DR T Helper Epitopes (PADRE) for antibody responses in vivo," Vaccine 15:441-448, Elsevier Science (1907)	+

Examiner Signature	Date Considered	4

*EXAMINER Initial if reference considered, whether or not citation is in conformance with M PEP 609. Draw line through citation if not in conformance and not considered, Include copy of this form with next communication to applicant.

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Substitute for			MENTAL	Application Number	10/551,209	_
			ISCLOSURE	§ 371 Date	September 28, 2005	
STATEMENT BY APPLICANT				First Named Inventor	Baker, Denise Marie	
(Use as many sheets as necessary)				Art Unit	1644	
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Sheet	2	of	8	Attorney Docket Number	2473,0260001/EKS/PAC	

NON PATENT LITERATURE DOCUMENTS

Examiner	Cita	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item	$\overline{}$
examiner nitials*	Cite No.1	(book, magazine, journal, senal, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	NPL90	DiBrino, M., et al., "Endogenous Peptides with Distinct Amino Acid Anchor Residue Motifs Bind to HLA-A1 and HLA-Bs," J. Immunol. 152:620-831, American Association of Immunologists (1994)	
	NPL91	DiBrino, M., et al., "The HLA-B14 Peptide Binding Site Can Accommodate Peptides with Different Combinations of Anchor Residues," J. Biol. Chem. 269:32426-32434. American Society for Biochemistry and Molecular Biology (1998).	
	NPL92	Donnelly, J.J., et al., "DNA Vaccines," Annu. Rev. Immunot. 15:617-648, Annual Reviews Inc. (1997)	
	NPL93	Francis, M.J., et al., "Non-responsiveness to a foot-and-mouth disease virus paptide overcome by addition of foreign helper T-cell determinants," Nature 330:168-170, Nature Publication Group (1987)	
	NPL94	Fynan, E.F., et al., "DNA vaccines: Protective immunizations by parental, mucosal, and gene-gun inoculations," Proc. Natl. Acad. Sci. USA 90:11478-11482, National Academy of Sciences (1993)	\dagger
	NPL95	Gileadi, U., et al., "Effect of epitope flanking residues on the presentation or N-tarminal cytotoxic T lymphocyte epitopes," Eur. J. Immunol. 29:2213-2222, WILEY-VCH Verlag GmbH (1999)	
	NPL96	Golvano, J., et al., "Polarity of immunogens: Implications for vaccine design," Eur. J. Immunol. 20:2363- 2366, VCH Verlagsgesellschaft mbH (1990)	1
	NPL97	Gulukota, K., et al., "Two Complementary Methods for Predicting Paptides Binding Major Histocompatibility Complex Molecules," J. Mol. Biol. 287:1258-1287, Academic Press Limited (1997)	
	NPL98	Hahn, Y.S., et al., "CD8+ T Cell Recognition of an Endogenously Processed Epitope is Regulated Primarily by Residues within the Epitope," J. Exp. Med. 178:1335-1341, Rocketeller University Press (1992)	
	NPL99	Hahn, Y.S., et al., "Presentation of Viral Antigen to Class I Major Histocompatibility. Compies Restricted Cytoloxic I: Cymphocyse. Recognition of a Immunodominent Inflanza Hemegglutinin Site by Cytotoxic T Lymphocyse is Independent of the Position of the Site in the Hemegglutinin Translation Product," J. Exp. Med. 1147-37-38. Rockefeller University Press (1991)	

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				Complete If Known		
Substitute for			MENTAL	Application Number	10/551,209	
			SCLOSURE	§ 371 Dafe	September 28, 2005	
			APPLICANT	First Named Inventor	Baker, Denise Marie	
0.,,		any sheets a		Art Unit	1644	
	(Ose as ii	iany sneets a	s ilecessary)	Examiner Name	To Be Assigned	
Sheet	3	of	8	Attorney Docket Number	2473,0260001/EKS/PAC	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	NPL100	Hammer, J., et al., "Precise Prediction of Major Histocompatibility Complex Class II-Peptide Interaction Based on Peptide Side Chain Scanning," J. Exp. Med. 180:2353-2358, Rockefeller University Press (1994)	
	NPL101	Hill, C.M., et al., "Exploration of Requirements for Peptide Binding to HLA DRB1*0101 and DRB1*0401," J. Immunol. 152:2890-2896, American Association of Immunologists (1994)	
	NPL102	Huczko, E.L., et al., "Characteristics of Endogenous Peptides Eluted from the Class I MHC Molecule HLA- B7 Determined by Mass Spectrometry and Computer Modeling," J. Immunol. 151:2572-2557, American Association of Immunologist (1933)	T
	NPL103	Ishinka, G.Y., et al., "Class I MHC-restricted, popilide specific cytotoxic T ymphocytes generated by peptide priming in vivo," in Vaccinessi: Modern Approaches to New Vaccines including Prevention of AIDS, Brown, F., et al., eds., Cold Spring harbor Laboratory Press, Cold Spring Harbor, NY, pp. 7-11 (1990)	
	NPL104	Ishioka, G.Y., et al., "Induction of Class I MHC-Restricted, Peptide-Specific Cytolytic T Lymphocytes by Peptide Priming In Vivo," J. Immunol. 143:1094-1100, American Association of Immunologists (1989)	
	NPL105	Jardetzky, T. S., et al., "Peptide binding to HLA-DR1: a peptide with most residues substituted to alanine retains MHC binding," EMBO J. 9:1797-1803, Oxford University Press (1990)	
	NPL106	Kast, W.M., et al., "Protection against lethal Sendai virus infection by in vivo priming of virus-specific cytoloxic T lymphocytes with e free synthetic peptide," Proc. Natl. Acad. Sci. USA 88:2283-2287, Netlonal Acadomy of Sciences (1891)	
-	NPL107	Kondo, A., et al., "Two distinct HLA-A'0101-specific submotifs illustrate elternative peptide binding modes," Immunogenetics 45:249-258, Springer-Verlag (1997)	
	NPL108	Kubitscheck, U., et al., "Peptide Binding to Class I Molecules of the Major Histocompatibility Complex on the Surfece of Living Terget Celts," Scand. J. Immunol. 36:341-348, Bisckwell Scientific Publications (1982)	1
	NPL109	Kubo, R.T., et al., "Definition of Specific Peptide Motifs for Four Major HLA-A Alleles," J. Immunol. 152:3913-3924, American Association of Immunologists (1994)	

Examiner Signature Date Considered

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Applicant's unique citation designation number (optional). Applicant is to place e check mark here if English language Translation is attached.

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				Complete If Known		
	or form 1449 FIRST	B/PTO SUPPLE	MENTAL	Application Number	10/551,209	
INF	ORM/	TION DIS	SCLOSURE	§ 371 Date	September 28, 2005	
			PPLICANT	First Named Inventor	Baker, Denise Marie	
	(Use a	is many sheets as i	necessary)	Art Unit	1644	
	,	,	,	Examiner Name	To Be Assigned	
Sheet	4	of	8	Attorney Docket Number	2473,0260001/EKS/PAC	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), litle of the article (when appropriate), itile of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	NPL110	Kumar, A., et al., "Universal T Helper Cell Determinants Enhance Immunogenicity of a Plasmodium falciparum Merozoite Surface Antigen Peptide," J. Immunol. 148:1499-1505, American Association of Immunologists (1992)	
	NPL111	Lasarte, J.J., et al., "Induction of Cytotoxic T Lymphocytes in Mice against the Principal Neutralizing Domain of HIV-1 by Immunization with an Engineered T-Cytotoxic-T-Helper Synthetic Helper Peptide Construct," Cell. Immunol. 141:211-218, Academic Press Inc. (1992)	
	NPL112	Madden, D.R., et al., 'The structure of HLA-B27 reveals nonamer self-peptides bound in an extended conformation," Nature 353:321-325, Nature Publishing Group (1991)	
	NPL113	Maler, R., et al., "Peptide motifs of HLA-A3, -A24, and -87 molecules as determined by pool sequencing," Immunogenetics 40:306-308, Springer-Verlag (1994)	
	NPL114	Martinon, F., et al., "Immunization of Mice with Lipopeptides Bypasses the Prerequisite for Adjuvant," J. Immunol. 149:3416-3422, American Association of Immunologists (1992)	
	NPL115	Niedermann, G., et al., "Contribution of Proteasome-Mediated Proteolysis to the Hierarchy of Epitopes Presented by Major Histocompatibility Complex Class I Molecules," Immunity 2:289-299, Cell Press (1995)	
	NPL116	Niedermann, G., et al., "The specificity of proteasomes: impact on MHC class I processing and presentation of antigens," Immunol. Rev. 172:29-48, Munksgaard (December 1999)	-
	NPL117	Nikolić-Žugić, J., and Carbone, F.R., "Peptide Presentation by Class-I Major Histocompatibility Complex Molecules," Immunol. Res. 10:54-95, S. Karger AG (1991)	
	NPL118	C'Sullivan, D., et al., "Characterization of the Specificity of Peptide Binding to Four DR Haplotypes," J. Immunol. 145:1799-1808, American Association of Immunologists (1990)	
	NPL119	O'Sullivan, D., et al., 'On the Interaction of Promiscuous Antigenic Peptides with Different DR Alletes,' J. Immunol. 147:2863-2669, American Association of Immunologists (1991)	

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Examiner Signature	Date Considered	

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Substitute for	. form 1440	D/DTO		Complete If Known		
			EMENTAL	Application Number	10/551,209	
			ISCLOSURE	§ 371 Date First Named Inventor Art Unit	September 28, 2005	
			APPLICANT		Baker, Denise Marie	
	(Use a	s many sheets a	ns necessary)		1644	
(and an inally directed an inconstant)				Examiner Name	To Be Assigned	
Sheet	5	of	8	Attorney Docket Number	2473,0260001/EKS/PAC	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	NPL120	Panina-Bordignon, P., et al., "Universally immunogenic T cell epticpes; promiscuous binding to human MHC class II and promiscuous recognition by T cells," Eur. J. Immunol. 19:2237-2242, VCH Verlagsgesellschaft mbH (1989)	
	NPL121	Paz, P., et al., "Discrete Proteolytic Intermediates in the MHC Class I Antigen Processing Pathway and MHC I-Dependent Peptide Trimming in the ER." Immunity 11:241-251, Cell Press (1999)	
	NPL122	Penna, A., et al., "Cytotoxic T Lymphocytes Recognize an HLA-A2-Restricted Epitope Within the Hepatitis B Virus Nucleocapsid Antigen," J. Exp. Med. 174:1565-1570, Rockefeller University Press (1991)	
	NPL123	Pryjma, J., et al., "Induction and Suppression of Immunoglobulin Synthesis in Cultures of Human Lymphocytes: Effects of Pokeweed Mitogen and Staphylococcus Aureus Cowan I," J. Immunol. 124:856- 691. Williams & Wilkins Co. (1980)	
	NPL124	Rahemtulia, A., et al., "Normal development and function of CD8+ cells but markedly decreased helper cell activity in mice lacking CD4," Nature 353:180-183, Nature Publishing Group (1991)	
	NPL125	Rammensee, H-G., et al., "SYFPEITH! database for MHC ligands and peptide motifs," Immunogenetics 50:213-219, Springer-Verlag (1999)	
	NPL126	Reitermann, A., et al., "Lipopeptide Derivatives of Bacterial Lipoprotein Constitute Potent Immune Adjuvants Combined with or Covalenty Coupled to Antigen or Hapten," Biol. Chem. Hoppe Seyler 370:343-352, Walter De Gnyuler (1989)	
	NPL127	Restrio, N.P., et al., "Antigen Processing In Vivo and the Elicitation of Primary CTL Responses," J. Immunol. 154:4414-4422, American Association of Immunologists (1995)	
	NPL128	Saper, M.A., et al., "Refined Structure of the Human Histocompatibility Antigen HLA-A2 at 2.6 A Resolution," J. Mol. Biol. 219:277-319, Academic Press Ltd. (1981)	
	NPL129	Schaeffer, E.B., et al., "Relative contribution of 'determinant selection' and 'holes in the T-cell repentoire' to T-cell responses," Proc. Natl. Acad. Sci. USA 86-4649-4653, National Academy of Sciences (1989)	

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Substitute fo		SUPPLE	MENTAL	Application Number	10/551,209	
INF	ORM/	ATION DIS	SCLOSURE	§ 371 Date First Named Inventor	September 28, 2005	
ST	ATEM	ENT BY A	APPLICANT		Baker, Denise Marie	
	(Use a	is many sheets as	necessary)	Art Unit	1644	
				Examiner Name	To Be Assigned	
Sheet	6	of	8	Attorney Docket Number	2473,0260001/EKS/PAC	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.3	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	NPL130	Schumacher, T.N.M., et al., "Peptide selection by MHC class I molecules," Nature 350:703-708, Nature Publishing Group (1991)	
	NPL131	Sette, A., and Sidney, J., "HLA supertypes and supermotifs: a functional perspective on HLA polymorphism," Curr. Opin. Immunol. 10:478-482, Current Biology Publications (1998)	
	NPL132	Sette, A., et al., "A Novel Approach to the Generation of High Affinity Class II-Binding Peptides," J. Immunol. 145:1809-1813, American Association of Immunologists (1980)	
	NPL133	Sette, A., et al., "Effect of Conformational Propensity of Peptide Antigens in Their interaction with MHC Class II Molecules," J. Immunol. 143:1288-1273, American Association of Immunologists (1989)	
	NPL134	Sette, A., et al., "Peptide Binding to the Most Frequent HLA-A Class I Alleles Measured by Quantitative Molecular Binding Assays," Mol. Immunol. 31:313-622, Pergamon Press (1994)	
	NPL135	Sidney, J., et al., 'Definition of an HLA-A3-Like Supermotif Demonstrates the Overlapping Peptide-Binding Repertoires of Common HLA Molecules,' Hum. Immunol. 45:79-83, Elsevier Science Inc. (1998)	
	NPL136	Sidney, J., et al., "Practical, biochemical and evolutionary implications of the discovery of HLA class I supermotifs," Immunol. Today 17:261-268, Elsevier Science (1986)	
	NPL137	Sidney, J., et al., "The HLA-A*0207 Peptide Binding Repertoire is Limited to a Subset of the A*0201 Repertoire," Hum. Immunol. 58:12-20, Elsevier Science Inc. (November 1997)	
	NPL138	Sinigagila, F., and Hammer, J., "Defining rules for the peptide-MHC class II interaction," Curr. Opin. Immunol. 6:52-56, Current Biology Ltd. (1994)	
	NPL139	Southwood, S., et al., "Several Common HLA-DR Types Share Largely Overlapping Peptide Binding Repertoires," J. Immunol. 160:3363-3373, American Association of Immunologists (1998)	

Examiner Signature		 Date Considered	

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				Complete If Known		
Substitute for			MENTAL	Application Number	10/551,209	
INFO	RMAT	ION D	SCLOSURE	§ 371 Date	September 28, 2005	
			APPLICANT	First Named Inventor	Baker, Denise Marie	
(Use as many sheets as necessary)				Art Unit	1644	
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Sheet	7	of	8	Attorney Docket Number	2473,0260001/EKS/PAC	

		NON PATENT LITERATURE DOCUMENTS		
Examiner Cite No.1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published		
	NPL140	Sprent, J., and Schaefer, M., "Proporties of Purified T Cell Subsets. I. In Vitro Responses to Class I vs. Class II H-2 Alloantigens," J. Exp. Med. 162 2088-2088, Rockefeller University Press (1985)		
	NPL141	Stark, J.M., et al., "Immunogenicity of lipid-conjugated antigens. I. The Influence of Chain Length and Degree of Conjugation on Induction of Antibody in Mice," Immunology 39:345-352, Blackwell Scientific Publications (1980)		
	NPL142	Steinman, R.M., 'Dendritic cells and immune-based therapies," Exp. Hematol. 24:859-862, Elsevier Science Inc. (1990)		
	NPL143	Sudo, T., ef al., "Differences in MHC Class I Self Peptide Repertoires Among HLA-A2 Subtypes," <i>J. Immunol.</i> 155:4749-4756, American Association of Immunologists (1985)		
	NPL144	Sugawara, S., et al., "A simple method to eliminate the antigenicity of surface class I MHC molecules from the membrane of viable cells by acid treatment at pH 3," J. Immunol. Methods 100:83-90, Elsevier Science (1907)		
	NPL145	Tem, J.P., and Lu, Y.A., "Vaccine engineering: Enhancement of immunogenicity of synthetic poptide vaccines related to hapetitis in chemically defined models consisting of T- and B-cell epitopes," Proc. Netl. Acad. Sci. USA 85:908-9086, National Academy of Sciences (1989)		
-	NPL146	Townsend, A., and Bodmer, H., "Antigen Recognition by Class i-Restricted T Lymphocytes," Ann. Rev. Immunol. 7:001-024, Annual Reviews, Inc. (1889)		
	NPL147	von Boehmer, H., and Haas, W., 'Distinct ir Genes for Helper and Killer Cells in the Cytotoxic Response to H-Y Antigen,' J. Exp. Med. 150:1134-1142, Rockefeller University Press (1979)		
	NPL148	Watari, E., et al., "A Synthetic Peptide Induces Long-Term Protection from Lethal Infection with Herpes Simplex Virus 2," J. Exp. Med. 165:459-470, Rockefeller University Press (1987)		
	NPL149	Wentworth, P.A., et al., 'In Vitro Induction of Primary, Antigen-Specific CTL from Human Peripheral Blood Mononuclear Cells Stimulated with Synthetic Peptides,' Mol. Immunol. 32:003-612, Elsevier Science Ltd. (1985)		

Examiner Signature	Date	
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), litle of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	NPL150	Wherry, E. J., et al., "The Induction of Virus-Specific CTL as a Function of Increasing Epitope Expression: Responses Rise Steadily Unit Excessively High Levels of Epitope Are Attained," J. Immunol. 183:3735- 3745, American Association of Immunologists (1999)	
	NPL151	Widmann, C., et al., "T helper epitopes enhance the cytotoxic response of mice immunized with MHC class I-restricted melana peptides," J. Immunol. Meth. 195:95-99, Elsevier Science Publishers B.V. (1992)	
	NPL152	Wiesmüller, K.H., et al., "Upopeptide-Helper-T-Cetl Epitope-CTL Epitope Conjugate Induces Antibodies Against the CTL Epitope," Innovation Perspective Solid Phase Synthesis Collect, Papers, Int. Symp. 2nd, pp. 499-502 (1991)	
	NPL153	Wiesmüller, K-H., et al., "Novel low-molecular-weight synthatic vaccine against foot-and mouth disease containing e potent B cell and macrophage ectivator," Vaccine 7:29-33, Butterworth & Co. (1989)	
	NPL154	Yewdell, J.W., and Bennink, J.R., "Immunodominance in Major Histocompatibility Complex Class I- Restricted T Lymphocyte Responses," Annu. Rev. Immunol. 17:51-88, Annual Reviews Inc. (1999)	T
	NPL155	Zhou, X., et al., "In vivo primary induction of virus-specific CTL by immunization with 9-mer synthetic peptides," J. Immunol. Methods 153:193-200, Elsevier Science Publishers B.V. (1992)	
	NPL158	Zinkernagel, R.M., et al., "The Lymphoreticular System in Triggering Virus Plus Self-Specific Cytotoxic T Cells: Evidence for T Help," J. Exp. Med. 147:897-911, Rockefeller University Press (1978)	
	NPL157	Altuvia, Y. et al., "A Structure-Based Algorithm to Predict Potential Binding Peptides to MHC Molecules with Hydrophobic Binding Pockets," Human Immunol. 58:1-11, Elsevier Science Inc. (1997)	T
	NPL158	U.S. Patent Application No. 10/817,970, Grey et al., filed April 6, 2004 (NOT PUBLISHED)	
			†

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